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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/058,409	01/30/2002	Nobutsune Kobayashi	00862.022500	4731
5514	7590	07/15/2004	EXAMINER	
FITZPATRICK CELLA HARPER & SCINTO			MCCLOUD, RENATA D	
30 ROCKEFELLER PLAZA			ART UNIT	
NEW YORK, NY 10112			PAPER NUMBER	

2837

DATE MAILED: 07/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary****Application No.**

10/058,409

**Applicant(s)**KOBAYASHI ET AL. *AK***Examiner**

Renata McCloud

**Art Unit**

2837

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 11 May 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,5-10 and 25-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,5-10 and 25-27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Response to Amendment*

1. The indicated allowability of claims 7-10, 23, and 24 (now amended claims 1, 5-10) is withdrawn in view of the newly discovered reference(s) to Kono et al (US 5,030,900). Rejections based on the newly cited reference(s) follow.

### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 5-10, 26, and 27 are rejected under 35 U.S.C. 102(b) as being anticipated by Kono et al (US 5,030,900).

**Claims 1, 5, and 6:** generating a first velocity (Fig. 4c:VCMOR1), determining if a mechanism arrives at a predetermined position with in a deceleration region (Fig. 4a: LS and MS signals); generating a second velocity (Fig. 4c: VCMOR2) having an initial value (Fig. 4c: VCMOR2 at changeover to MS signal) less than a minimum value of the first velocity (Fig. 4c: VCMOR1), upon determination of the mechanism arriving at a predetermined position. (Col. 2: 9-27).

**Claim 7:** generating a first velocity (Fig. 4c:VCMOR1); generating a second velocity (Fig. 4c: VCMOR2) having an initial value (Fig. 4c: VCMOR2 at changeover to MS signal) less than a minimum value of the first velocity (Fig. 4c: VCMOR1), upon

determination of the mechanism arriving at a predetermined position. (Col. 2: 9-27); and change means (Fig. 1: 10 transmits MS changeover signal) for changing the velocity command value generation means at predetermined timing within a deceleration region (Fig. 4c: MS changeover signal).

**Claim 8:** the changeover means (Fig. 1: 10 transmits MS changeover signal) changes the velocity command when the mechanism arrives at a predetermined position.

**Claim 9:** the first function (Fig. 3: VCMOR1) represents a curve and the second function (Fig. 3: VCMOR2) outputs a constant value.

**Claim 25:** the device is a printing mechanism

**Claim 26:** the change means performs the changing a plurality of times to decrease the velocity command (Fig. 4c: MS signal).

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 10, 25, and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kono et al as applied to claims 9, 1, and 7 above, and further in view of Kazuya (JP 2000-188894).

**Claim 10:** Kono et al teach the limitations of claim 9. Referring to claim 10, they do not teach the first function is a cubic function. Kazuya teaches a first velocity profile (PG. 1:0007) that is a cubic function (Fig. 1; Pg. 6: 0051). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the apparatus taught by Kono et al to use a cubic function as taught by Kazuya. The advantage of this would be the ability to gradually accelerate/decelerate the mechanism to prevent damage the mechanism.

**Claims 25 and 27:** Kono et al teach the limitations of claims 1 and 7. Referring to claims 25 and 27, they do not teach the device is a printing mechanism. Kazuya teaches a printing mechanism (Fig. 2). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the method taught by Kono et al to be used in a printing apparatus as taught by Kazuya. The advantage of this would be smooth acceleration/deceleration so as to prevent damage to the motor.

### ***Conclusion***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. They are: Kohzai et al (US 4,403,181).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Renata McCloud whose telephone number is (571) 272-2069. The examiner can normally be reached on Mon.- Fri. from 8 am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Martin can be reached on (571) 272-2800 ext. 4. The fax phone

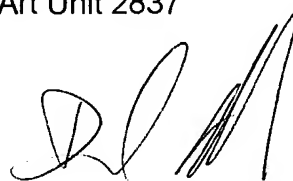
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number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

RDM

Renata McCloud  
Examiner  
Art Unit 2837

A handwritten signature in black ink, appearing to read 'DAVID MARTIN', with a stylized, overlapping 'D' and 'M'.

DAVID MARTIN  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2800